

Listing of Claims:

1. (Currently Amended) An ultrasonic inspection method to evaluate a welding condition in a weld zone of a flange and a web of an actual piece to be measured, said method comprising ~~the steps of:~~

5 preparing test pieces, including a basic test piece, such that each of said test ~~piece~~ pieces has a slit , said with substantially a same shape as a slit in the weld zone of the actual piece to be measured, and such that the slit of each of said test pieces has a different height; and an almost the same
10 shape as a slit in said weld zone;

 transmitting ultrasonic pulses ~~by~~ with a probe to said slit ~~in said each test piece~~ and measuring echoes ~~by~~ with said probe ~~while moving said probe on said each test piece while positioning the probe at a plurality of measuring positions of each of said~~
15 test pieces;

 determining a measuring position where an echo height extracted from a measured echo of ~~a~~ the basic test piece is clearly ~~distinguished~~ distinguishable from echo heights extracted from measured echoes of other test pieces at the measuring
20 position;

providing ~~a~~ master data based on ~~said each~~ the echo height
heights extracted from the measured echoes of each of said test
pieces at said determined measuring position;

25 locating said probe at said determined measuring position on
said flange or said web of said actual piece to be measured;

transmitting ultrasonic pulses ~~by~~ with said probe to said
slit in said weld zone of said actual piece to be measured and
measuring echoes ~~by~~ with said probe ~~while moving said probe at a~~
plurality of positions on said flange or said web;

30 comparing said measured echoes returned from said weld zone
with said master data;

determining a welding condition at said weld zone based on
said comparison.

2. (Currently Amended) The method as claimed in claim 1,
wherein said probe is installed in a tracing apparatus which is
provided with at least one roller so as to determine ~~entirely~~
said welding condition ~~with~~ of an entirety of the weld zone
while maintaining a distance between said weld zone and said
probe.